# IN THE U.S. PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of Appeal No.

Sumit ROY et al. Conf. 6741

Application No. 10/522,815 Group 3731

Filed October 21, 2005 Examiner Kathleen Sonnett

METHOD AND DEVICE FOR INTERCONNECTION OF TWO TUBULAR ORGANS

#### APPEAL BRIEF

MAY IT PLEASE YOUR HONORS:

# 1. Real Party in Interest

The real parties in interest in this appeal are:

Sumit Roy, Vaekeroveien 106, Oslo, Norway N-0383;

Erik Fosse, Maridalsveien 71B, Oslo, Norway N-0458; and

Ole Jakob Elle, Jolly-Kramer-Johansensgt. 8, Oslo,

Norway N-0475.

# 2. Related Appeals and Interferences

None.

# 3. Status of Claims

Claims 1-19, 31 and 32 have been canceled. Claims 20-30 and 33-35 are pending in the application. Claims 20-30 and 33-35 have been finally rejected, from which this appeal is taken.

# 4. Status of Amendments

No amendments have been filed subsequent to the final rejection mailed February 12, 2009. The claims at issue are thus those set forth in the amendment filed November 12, 2008.

#### 5. Summary of Claimed Subject Matter

Independent claim 20: As is set forth in independent claim 20, the present invention pertains to a device for interconnection of a first organ to a second organ that includes:

- (a) a first element 1 with an axially through-going first passage along a first longitudinal axis 31, a first front end portion 3, a first front edge 4, a first rear end portion 5, and a first rear edge 6 (page 6, lines 1-5), and
- (b) a second element 2 with an axially through-going second passage 34 along a second longitudinal axis 33, a second rear end portion or receiving portion 9, and a second front portion 35 (page 6, lines 16-20), wherein,
- 1) the second front portion 35 is provided with at least two elongated first fingers 11 which are arranged at intervals along the circumference of the first passage (page 5, lines 27-30), and,
- 2) said fingers 11 are of uniform thickness (Figures 11-13),
- 3) each of said fingers 11 is formed from a main portion 37 extending from the second front portion 35 and in the direction of the second longitudinal axis 33 (page 6, lines 31-33), and,
- 4) said main portion 37 is continuous with a gripping part 12, where the gripping part 12 is directed away from the

second longitudinal axis 33 in an undeformed condition of said second element 2 (page 6, lines 35-36), such that,

introduction of the first element 1 into the second element 2 displaces the main portions of the fingers 11 radially outwards (page 6, lines 37-39).

Independent claim 35: As is set forth in independent claim 35, the present invention pertains to a device for interconnection of a first organ to a second organ that includes:

- (a) a first element 1 with an axially through-going first passage along a first longitudinal axis 31, a first front end portion 3, a first front edge 4, a first rear end portion 5, and a first rear edge 6 (page 6, lines 1-5), and
- (b) a second element 2 with an axially through-going second passage 34 along a second longitudinal axis 33, a second rear end portion or receiving portion 9, and a second front portion 35 (page 6, lines 16-20), wherein,
- 1) the second front portion 35 is provided with at least two elongated first fingers 11 which are arranged at intervals along the circumference of the first passage (page 5, lines 27-30), and,
- 2) each of said fingers 11 is formed from a main portion 37 extending from the second front portion 35 and in the direction of the second longitudinal axis 33 (page 6, lines 31-33), and,

3) said main portion 37 is continuous with a gripping part 12, where the gripping part is directed away from the second longitudinal axis 33 in an undeformed condition of said second element 2 (page 6, lines 35-36), such that,

introduction of the first element 1 into the second element 2 displaces the main portions of the fingers 11 radially outwards (page 6, lines 37-39).

#### 6. Grounds of Rejection to be Reviewed on Appeal

The first ground for review on appeal is whether claims 20-30, 34 and 34 lack written description sufficient to support a rejection under 35 USC §112, first paragraph.

The second ground for review on appeal is whether claims 20-25, 30 and 33-35 are sufficiently anticipated by BLOOMER (U.S. Patent 2,537,183) to support a rejection under 35 USC \$102(b).

The third ground for review on appeal is whether claim 26 is sufficiently unpatentable over BLOOMER in view of HART (U.S. Patent 1,339,620) to support a rejection under 35 USC \$103(a).

The fourth ground for review on appeal is whether claim 27 is sufficiently unpatentable over BLOOMER in view of DEFAUW (U.S. Patent 3,358,357) to support a rejection under 35 USC \$103(a).

The fifth ground for review on appeal is whether claim 28 is sufficiently unpatentable over BLOOMER in view of HAURY (U.S. Patent 2,211,776) to support a rejection under 35 USC \$103(a).

The sixth ground for review on appeal is whether claim 29 is sufficiently unpatentable over BLOOMER in view of FROST (U.S. Patent 3,228,713) to support a rejection under 35 USC \$103(a).

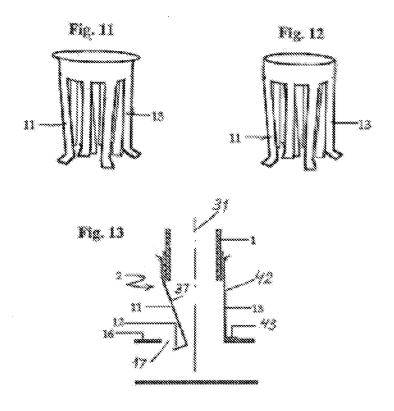
#### 7. Argument

# 7.1 First Ground: Rejection Under 35 USC §112, First Paragraph

Independent claim 20 of the present invention recites: "said fingers are of uniform thickness."

At paragraph 2 the Official Action of February 12, 2009 asserts "Applicant claims that the fingers are of uniform thickness. However, there is no disclosure in the specification or figures to support a limitation of fingers made of material with a uniform thickness."

As can bee seen, the application's drawing figures clearly show a uniform thickness of the main portion 11 and the gripping portion 12, as is shown by way of example, in Figures 11-13, which are reproduced below.



The Official Action itself concedes: "Although the cross section shows the finger is relatively the same thickness where the cross-section was taken, this doesn't mean that each of the fingers could not be thicker at locations circumferentially offset of the place where the cross section was taken." Indeed, care was taken to ensure that in every drawing figure showing the fingers in cross-section, their thickness was uniform.

Nonetheless, even if arguendo there could be other thicknesses (as asserted in the Official Action), the applicant is still entitled to claim uniform thicknesses since United States case law points out the specification need not describe the claimed invention in *ipsis verbis* to comply with the written description requirement. In re Edwards, 568 F.2d 1349, 196 USPQ 465 (CCPA 1978). The test is whether the disclosure reasonably conveys to one of ordinary skill that applicant had possession of the claimed subject matter. In re Kaslow, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983).

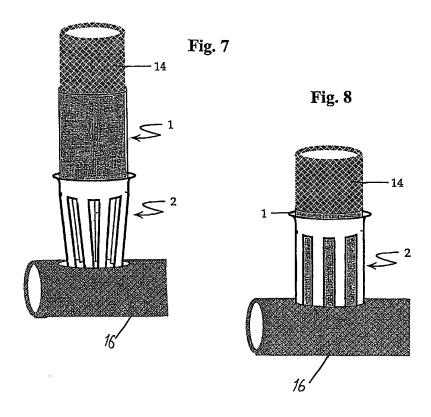
As a result, the claims are in full compliance with the written description requirement.

This rejection under 35 USC \$112, first paragraph should accordingly be withdrawn.

### 7.2 Second Ground: Rejection Over BLOOMER

The present invention pertains to a connecting device having a first element 1 and a second element 2 that is shown, by

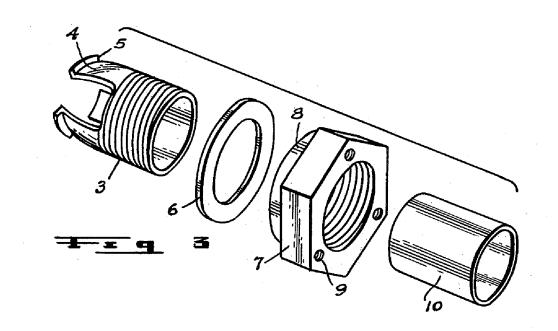
way of example, in Figures 7 and 8 of the application, reproduced below.



The second element is provided with at least two elongated first fingers which are arranged at intervals along the circumference of the first passage, and the fingers are of uniform radial thickness. Each of the fingers is formed from a main portion extending from a second front portion and in the direction of a second longitudinal axis, and the main portion is continuous with a gripping part, wherein the gripping part is directed away from the second longitudinal axis in an undeformed condition of said second element, such that introduction of the first element into the second element displaces the main portions

of the fingers radially outwards. See independent claims 20 and 35.

BLOOMER pertains to a coupling connection having a third element, including a threaded tubing having one end formed with an inwardly curving reduced internal diameter. See claim 1 and Figure 3 of BLOOMER, reproduced below.



BLOOMER includes a third element, a nut 7, receivable on the threads of the first element (claim 1, column 3, line 48, claim 2, column 3, line 57, claim 3, column 4, line 10, claim 4, column 4, line 23, claim 5, column 4, line 39). In contrast, the present invention includes only two elements as clearly stated in claim 1.

That is, the present invention has a second element that does not incorporate threads. The device of claim 1 of the present invention is composed of only two elements.

Now considering dependent claims 21-25, it is pertinent to note that: "the mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device." Ex parte Chicago Rawhide Mfg. Co., 223 U.S.P.Q. 351, 353 (Bd. Pat. App. & Inter. 1984).

Paragraph 5 of the Official Action of February 12, 2009 notes that "any of the other fingers [in Bloomer's invention] ... is capable of abutting against the outer surface of the second organ." However, BLOOMER already provides both an annular gasket 6 (Figures 1-3; page 1, column 2, line 13) and a clamping nut 7 with a circular flange 8 (Figures 1-3; page 1, col. 2, line 16) that does abut on the outer surface. Thus there is no rationale to incorporate a second finger that can abut against the outer surface as described by present invention.

Indeed, it is clear that BLOOMER patent actually teaches away from such a modification, because the second finger or fingers would defeat the entire purpose of gasket 6 and flange 8, and make the coupling connection leak prone.

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.  $W.L.\ Gore\ \&\ Associates,\ Inc.\ v.$ 

Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983),
cert. denied, 469 U.S. 851 (1984).

It logically follows that the rejection of claims 22-24 of the present invention under 35 USC § 102 is moot because these claims are dependant on claim 21.

According to the Official Action of February 12, 2009, the clamping nut 7 with flange 8 is analogous to the external sleeve-shaped casing 13a of claim 25 of the present invention. In contrast, as BLOOMER makes abundantly clear, the (threaded) clamping nut is an independent structure that serves to secure gasket 6 to the outer surface of wall 1, and thereby hinder movement of "hooking member" 3 within "blind hole" 2, and is hence neither the structural nor the functional equivalent of the present invention's casing 13a. The latter forms an integral part of inner tube 1, which is equivalent to BLOOMER's thinwalled tubing 10, is not threaded, and is incapable of securing a gasket as taught by BLOOMER.

Hence, incorporation of casing 13a into BLOOMER's invention as envisaged by Official Action is utterly meaningless, if not an exercise in futility.

Also, even "if the prior art device performs all the functions recited in the claim, the prior art cannot anticipate the claim if there is any structural difference." That there is no ambiguity in this interpretation of 35 USC § 102 has been

confirmed in *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1951 (Fed. Cir. 1999).

Additionally, omission of an element and retention of its function is an *indicia* of patentability. In re Edge, 359 F.2d 896, 149 USPQ 556 (CCPA 1966) (Claims at issue were directed to a printed sheet having a thin layer of erasable metal bonded directly to the sheet wherein said thin layer obscured the original print until removal by erasure. The prior art disclosed a similar printed sheet which further comprised an intermediate transparent and erasure-proof protecting layer which prevented erasure of the printing when the top layer was erased. The claims were found patentable over the prior art because although the transparent layer of the prior art was eliminated, the function of the transparent layer was retained since appellant's metal layer could be erased without erasing the printed indicia.).

That is, BLOOMER unambiguously states that the first element 10 is threaded (claim 1, column 3, line 43, claim 2, column 3, line 54, claim 3, column 4, line 4, claim 4, column 4, line 17, claim 5, column 4, line 33).

In contrast, in the present invention, the corresponding structure, the second element 2, does not incorporate such a limitation. The case for equivalence between structure 10 of BLOOMER's patent and structure 2 of the present invention made by the Official Action does not hold up under scrutiny, because "the accused device must contain at least an

equivalent for each limitation" (Pennwalt Corp v Durand-Wayland Inc, 833 F2d 931 (Fed. Cir. 1987). Further as was clarified in In re Ruff, 256 F.2d 590, 118 USPQ 340 (CCPA 1958), "equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure."

That is, when alleging anticipation under 35 U.S.C. \$102, the entire claim must be considered. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). "[A]ll the claim limitations must be taught or suggested by the prior art." In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All the words of a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

BLOOMER thus fails to anticipate claim 20 of the present invention. Claims depending upon claim 20 are patentable for at least the above reasons.

This anticipation rejection over BLOOMER should accordingly be withdrawn.

#### 7.3 Third Ground: Rejection Over BLOOMER And HART

## 7.3.1 Interpretation of 35 USC §103

When a rejection is based on 35 USC §103, what is in issue in such a rejection is "the invention as a whole," not just a few features of the claimed invention. Under 35 U.S.C. §103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains." determination under \$103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. See Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 USC §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art

would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reasoning must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

The criteria for patentability has been refined by the by the Supreme Court in KSR International Co. v. Teleflex Inc. (KSR), 550 U.S. 398, 82 USPQ2d 1385 (2007). The Supreme Court in KSR reaffirmed the familiar framework for determining obviousness as set forth in Graham v. John Deere Co. (383 U.S. 1, 148 USPQ 459 (1966)), but stated that the Federal Circuit had erred by applying the teaching-suggestion-motivation (TSM) test in an overly rigid

and formalistic way. KSR, 550 U.S. at \_\_\_\_, 82 USPQ2d at 1391. Specifically, the Supreme Court stated that the Federal Circuit had erred in four ways: (1) "by holding that courts and patent examiners should look only to the problem the patentee was trying to solve" (Id. at \_\_\_\_, 82 USPQ2d at 1397); (2) by assuming "that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem" (Id.); (3) by concluding "that a patent claim cannot be proved obvious merely by showing that the combination of elements was 'obvious to try'" (Id.); and (4) by overemphasizing "the risk of courts and patent examiners falling prey to hindsight bias" and as a result applying "[r]igid preventative rules that deny factfinders recourse to common sense" (Id.).

Although the Supreme Court in KSR cautioned against an overly rigid application of teaching-suggestion-motivation (TSM) rationale, it also recognized that TSM was one of a number of valid rationales that could be used to determine obviousness. (According to the Supreme Court, establishment of the TSM approach to the question of obviousness "captured a helpful insight." 550 U.S. at \_\_\_\_, 82 USPQ2d at 1396 (citing In re Bergel, 292 F.2d 955, 956-57, 130 USPQ 206, 207-208 (1961)).

Further, a finding of unpatentability over 35 USC §103 can be rebutted by a showing of unexpected results. Any differences between the claimed invention and the prior art may be expected to result in some differences in properties. The issue is

whether the properties differ to such an extent that the difference is really unexpected. In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) (differences in sedative and anticholinergic effects between prior art and antidepressants were not unexpected). In In re Waymouth, 499 F.2d 1273, 1276, 182 USPQ 290, 293 (CCPA 1974), the court held that unexpected results for a claimed range as compared with the range disclosed in the prior art had been shown by a demonstration of "a marked improvement, over the results achieved under other ratios, as to be classified as a difference in kind, rather than one of degree." Compare In re Wagner, 371 F.2d 877, 884, 152 USPQ 552, 560 (CCPA 1967) (differences in properties cannot be disregarded on the ground they are differences in degree rather than in kind); Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) ("we generally consider a discussion of results in terms of 'differences in degree' as compared to 'differences in kind' . . . to have very little meaning in a relevant legal sense").

#### 7.3.2. Distinctions Over The BLOOMER and HART

The failure of BLOOMER to anticipate a claimed embodiment of the present invention has been discussed above. BLOOMER additionally fails to be usable as the basis or an assertion of *prima facie* unpatentability.

The present invention is designed for joining ("anastomosing") tubular structures in a living organism, while BLOOMER specifically states that the object of his invention is

connection to "various types of containers and castings" (column 1, line 3).

HART's invention represents a "coupler for connecting two sections of a hose" (column 1, line 11).

One of ordinary skill in the art would recognize that BLOOMER's technology, alone or combined with cited prior art, cannot be used for joining tubular organs in vivo. That BLOOMERS's invention has not found use as an implant for anastomosing organs, despite being in the public domain for over 50 years, is eloquent testimony to its status as non-analogous art. The present invention, on the other hand, has already been reduced to practice in the laboratory.

For determining obviousness, "it is the invention as a whole that must be considered ..., and the invention as a whole includes the problem it solves." See, e.g., Cable Electric Products, Inc. v. Genmark, Inc., 770 F.2d 1015, 1025, 226 USPQ 881, 886 (Fed.Cir.1985). The problem an invention solves must necessarily be taken into consideration in the evaluation of an invention and putative prior art. In re Rinehart, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976): "the particular problem facing the inventor must be considered in determining obviousness". The applicant's invention and the prior art "(faced) different problems requiring different solutions." In re Benno, 768 F.2d 1340, 1346, 226 USPQ 683, 687 (Fed.Cir.1985). As reiterated in In re Wright, 6 UUSPQ 2d 1959 (1988), "the problem

solved by the invention is always relevant. The entirety of a claimed invention, including the combination viewed as a whole, the elements thereof, and the properties and purpose of the invention, must be considered".

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of BLOOMER and HART. A prima facie case of unpatentability has thus not been made.

This unpatentability rejection should accordingly be withdrawn.

## 7.4 Fourth Ground: Rejection Over BLOOMER And DEFAUW

The failure of BLOOMER to anticipate a claimed embodiment of the present invention has been discussed above, as well as the basis of 35 USC §103.

BLOOMER additionally fails to be usable as the basis or an assertion of  $prima\ facie$  unpatentability.

The present invention is designed for joining ("anastomosing") tubular structures in a living organism, while BLOOMER specifically states that the object of his invention is connection to "various types of containers and castings" (column 1, line 3).

DEFAUW describes a "novel procedure for fixing a plastic collar or grommet in the orifice used for filling or emptying (a) vessel" (columns 1, line 21).

One of ordinary skill in the art would recognize that BLOOMER's technology, alone or combined with DEFAUW, cannot be used for joining tubular organs in vivo. That BLOOMERS's invention has not found use as an implant for anastomosing organs, despite being in the public domain for over 50 years, is eloquent testimony to its status as non-analogous art. The present invention, on the other hand, has already been reduced to practice in the laboratory.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of BLOOMER and DEFAUW. A prima facie case of unpatentability has thus not been made.

This unpatentability rejection should accordingly be withdrawn.

#### 7.5 Fifth Ground: Rejection Over BLOOMER And HAURY

The failure of BLOOMER to anticipate a claimed embodiment of the present invention has been discussed above, as well as the basis of 35 USC §103.

BLOOMER additionally fails to be usable as the basis or an assertion of *prima facie* unpatentability.

The present invention is designed for joining ("anastomosing") tubular structures in a living organism, while BLOOMER specifically states that the object of his invention is connection to "various types of containers and castings" (column 1, line 3).

The coupling described by HAURY was for tubing, and more particularly to coupling for metallic tubing which is subject to exceptional vibration during use (column 1, line 1).

At this point, it is pertinent to point out that for any prior art reference to be validly combined for use in a \$103 rejection, the references themselves (or some other prior art) must suggest that they be combined as was stated in *In re Sernaker*, 217 USPQ 1, 6 (C.A.F.C. 1983). See also *Orthopedic Equipment Company. v. United States*, 217 USPQ 193, 199 (C.A.F.C. 1983).

According to the Official Action of February 12, 2009 claim 28 is unpatentable over BLOOMER and HAURY because HAURY has described "provision of perforations on inner tubular member into which portions of the outer tubular members can protrude" to allow "strong, non-separable fluid-tight coupling."

What the Official Action revealingly fails to explain is how the proposed modification could be incorporated in BLOOMER's invention, and yet retain the essential features of the latter recited in claim 20.

One of ordinary skill in the art would recognize that BLOOMER's technology, alone or combined with HAURY, cannot be used for joining tubular organs in vivo. That BLOOMERS's invention has not found use as an implant for anastomosing organs, despite being in the public domain for over 50 years, is eloquent testimony to its status as non-analogous art. The

present invention, on the other hand, has already been reduced to practice in the laboratory.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of BLOOMER and HAURY. A prima facie case of unpatentability has thus not been made.

This unpatentability rejection should accordingly be withdrawn.

#### 7.6 Sixth Ground: Rejection Over BLOOMER And FROST

The failure of BLOOMER to anticipate a claimed embodiment of the present invention has been discussed above, as well as the basis of 35 USC §103.

BLOOMER additionally fails to be usable as the basis or an assertion of  $prima\ facie$  unpatentability.

The present invention is designed for joining ("anastomosing") tubular structures in a living organism, while BLOOMER specifically states that the object of his invention is connection to "various types of containers and castings" (column 1, line 3).

FROST pertains to a pressure sealed and locked pipe and hose coupling. At column 1, lines 35-36 FROST discusses: "Couplings of this nature may be used to connect portable irrigation pipe, garden or irrigation hose, oil pipe or hose and the like."

The Official Action of February 12, 2009 refers to FROST for teachings pertaining to flared ends.

However, one of ordinary skill in the art would recognize that BLOOMER's technology, alone or combined with FROST, cannot be used for joining tubular organs in vivo. That BLOOMERS's invention has not found use as an implant for anastomosing organs, despite being in the public domain for over 50 years, is eloquent testimony to its status as non-analogous art. The present invention, on the other hand, has already been reduced to practice in the laboratory.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of BLOOMER and DEFAUW. A prima facie case of unpatentability has thus not been made.

This unpatentability rejection should accordingly be withdrawn.

#### 8. Conclusion

To put it succinctly, the present invention does away with the screw thread mechanism integral to BLOOMER's coupling connection, allowing the former to be used for joining tubular organs. That the invention has already reduced to practice in the laboratory, contrary to BLOOMER's (and the secondary references') teaching, confirms that it passes the tests of novelty, non-obviousness and utility.

The Appellants have demonstrated that the Examiner has failed to successfully allege that the rejected claims are anticipated or prima facie unpatentable. It is clear that the inventive technology for connecting a first to a second organ is truly inventive and sufficiently described in the disclosure. For the reasons advanced above, it is respectfully submitted that all the rejected claims in this application are allowable. Thus, favorable reconsideration and reversal of the Examiner's rejections of claims 20-30 and 33-35 under 35 USC §\$112/102/103, by the Honorable Board of Patent Appeals and Interferences, are respectfully solicited.

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No. 25-0120 for any additional fees required under 37 C.F.R. \$ 1.16 or under 37 C.F.R. \$ 1.17.

Respectfully submitted,

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July 13, 2009

#### 9. Claims Appendix

- 20. A device for interconnection of a first organ to a second organ comprising:
- (a) a first element with an axially through-going first passage along a first longitudinal axis, a first front end portion, a first front edge, a first rear end portion, and a first rear edge, and
- (b) a second element with an axially through-going second passage along a second longitudinal axis, a second rear end portion or receiving portion, and a second front portion, wherein,
- 1) the second front portion is provided with at least two elongated first fingers which are arranged at intervals along the circumference of the first passage, and,
  - 2) said fingers are of uniform thickness,
- 3) each of said fingers is comprised of a main portion extending from the second front portion and in the direction of the second longitudinal axis, and,
- 4) said main portion is continuous with a gripping part, wherein the gripping part is directed away from the second longitudinal axis in an undeformed condition of said second element, such that,

introduction of the first element into the second element displaces the main portions of the fingers radially outwards.

- 21. A device according to claim 20, wherein the second element is provided with at least one additional, second finger, the second finger being comprised of a main portion, and a support part, such that the second finger is arranged to abut against the outside of the second organ when the gripping parts have been inserted in the second organ.
- 22. A device according to claim 21, wherein the main portion of at least one of the second fingers has a radially outward convex configuration.
- 23. A device according to claim 22, wherein the second element is provided with an annular collar, said collar being movable longitudinally along the outer surface of the second element.

- 24. A device according to claim 23, wherein that at least one finger is provided with a shoulder which protrudes radially outwards from the said finger, such that said shoulder restricts longitudinal mobility of the annular collar.
- 25. A device according to claim 20, wherein the first element is provided with an external sleeve-shaped casing with a front end, said casing being continuous with the first element at the first rear edge, such that the casing and the first element define a cylindrical annulus that stops short of the front end of the first element.
- 26. A device according to claim 25, wherein the casing is provided with a slot which extends from the front end of the casing, and the second element is provided with an outwardly projecting pin, such that said pin engages said slot when the first element is inserted in the second element.
- 27. A device according to claim 20, wherein the first element (1) is provided a shoulder, such that said shoulder abuts against the second rear end portion of the second element during insertion of the first element in the second element, thereby restricting the depth of insertion of the first element in the second element.

- 28. A device according to claim 20 wherein the second element or the first element or both are perforated.
- 29. A device according to claim 20 wherein that the rear end portion of the second element is flared or bevelled.
- 30. A device according to claim 20, wherein the front edge of the first element defines a first plane and the gripping parts define a second plane, such that the first plane and the second plane form the same angle with respectively the longitudinal axes of the first element and the second element, when the first element is inserted in the second element.
- 33. A device according to claim 20, wherein said fingers gradually progressively incline radially inwardly of said second element.
- 34. A device according to claim 33, wherein said gradual progressive radially inward inclination of said fingers extends over most of the length of the fingers, whereby insertion of said first element into said second element gradually progressively moves said fingers radially outwardly of said second element.

- 35. A device for interconnection of a first organ to a second organ comprising:
- (a) a first element with an axially through-going first passage along a first longitudinal axis, a first front end portion, a first front edge, a first rear end portion, and a first rear edge, and
- (b) a second element with an axially through-going second passage along a second longitudinal axis, a second rear end portion or receiving portion, and a second front portion, wherein,
- 1) the second front portion is provided with at least two elongated first fingers which are arranged at intervals along the circumference of the first passage, and,
- 2) each of said fingers is comprised of a main portion extending from the second front portion and in the direction of the second longitudinal axis, and,
- 3) said main portion is continuous with a gripping part, wherein the gripping part is directed away from the second longitudinal axis in an undeformed condition of said second element, such that,

introduction of the first element into the second element displaces the main portions of the fingers radially outwards.

# 10. Evidence Appendix

None

# 11. Related Proceedings Appendix

None.